

Please amend page 21, lines 17 through page 22 to read as follows:

BRIEF DESCRIPTION OF THE DRAWINGS

[[The]] Figures 1 and 3 are ~~show examples of maps of~~ plasmids which can be used respectively to obtain and to express the polynucleotides according to the present invention as well as and Figure 2 is a set of graphs showing experimental results with respect to ~~nucleic acids or microorganisms~~ transformed with the nucleic acids according to the invention.

~~It shows~~

FIG. 1 [[The]] is a map of the integration plasmid pK19mobsacB-DeltasdaA. Markings on the outer edge of the plasmid indicate the respective restriction sites. The portion within the circle indicates the following gene:

kan	kanamycin resistance
sacB	Sucrose
OriT	Transfer origin
sda'	5' end of the <i>sdaA</i> gene
sda"	3' end of the <i>sdaA</i> gene

FIG. 2 : ~~A graph of~~ is a set of graphs showing the ratio between growth (square symbol  $\square$ ) and L-serine breakdown (circle

symbol ○) of *C. glutamicum* 13032 $\Delta$ panBC $\Delta$ sdaA, clone 1 (□, ○) and *C. glutamicum* 13032 $\Delta$ panBC $\Delta$ sdaA, clone 2 (■, ●) compared with *C. glutamicum* 13032 $\Delta$ panBC, clone 1 (□, ○) and *C. glutamicum* 13032 $\Delta$ panBC, clone 2 (■, ●). The abscissa X represents the fermentation in hours (h). The ordinate  $y_1$  is the growth of the microorganisms measured in terms of optical density at 600 nm. The ordinate  $y_2$  gives the L-serine concentration in mM.

FIG 3 [[: The]] is a map of the expression plasmid pEC-T18mob2-serA<sup>fbr</sup>CB.

The indicia on the outer edge of the plasmid show the respective restriction sites. The indicia within the circle represent the following genes:

SerC	Phosphoserine Transaminase
SerB	Phosphoserine Phosphatase
Rep	Replication origin
Per	Partition cell partition gene
Tet	Tetracycline resistance gene
RP4-mob	Mobilization origin
OriV	Source of DNA replication
SerA-fbr	3-phosphoglycerate dehydrogenase

## REMARKS

Applicants are submitting this amendment in order to be responsive to the Examiner's requirement for restriction and to remove some minor informalities in the specification.

In response to the requirement for restriction, Applicants provisionally elect to prosecute the claims of Group I. The election is made with a partial traverse.

Applicants believe that there is a common technical feature that links the claims of Group I with at least some of the claims of Group II and some of the claims of Group III. In the office action the Examiner notes that the claims of Group I include claim 10 directed to a nucleic acid encoding a mutant L-serine dehydratase polypeptide whose positions 506 through 918 of SEQ ID NO:1 are mutated to give reduced L-serine dehydratase activity and the claims of Group II include claims directed to the mutant L-serine dehydratase polypeptide whose positions 134 through 274 are correspondingly altered with respect to the nucleic acids of Group I. Thus the polypeptide of claim 10, within Group II, is encoded by the nucleotide sequence as defined within the claims of Group I, specifically claim 3. The surprising technical advantage according to the presently claimed invention is that the new mutant L-serine dehydratase still catalyzes the conversion of glucose to serine, but avoids the undesired decomposition of serine to form pyruvic acid characteristic of the wild type enzyme.

As noted in Chapter 10, §10.59, Example 39 of the PCT International Search and Preliminary Examination Guidelines established by the International Bureau of WIPO for the determination of unity of invention, claims to a protein and its encoding DNA are to be considered together as having unity of invention. Because the nucleic acids of the claims of Group I, specifically as defined in claim 3, encode the polypeptides of Group II, claim 10, the latter claim should be examined together with the claims of Group I.

Similarly, Applicants ask that claim 23 of Group III also be examined together with the claims of Group I since claim 23 is directed to a method for the microbial production of L-serine which employs a genetically altered microorganism containing the same nucleic acid encoding a mutant L-serine dehydratase polypeptide whose positions 506 through 918 of SEQ ID NO:1 are mutated as covered by the claims of Group I to give the same reduced L-serine dehydratase as covered in claim 10 of Group II with the same surprising advantage over the wild type enzyme.

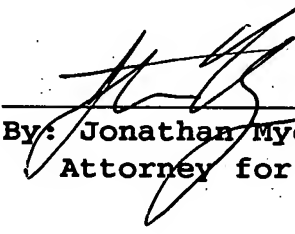
Applicants have also amended the specification on page 4 to delete the paragraph in the Description of the Invention that refers to specific claims by number, which is not permitted under US Patent Practice and have replaced that paragraph with corresponding material that does not refer to the claims by number. Antecedent basis for the amendment may be found in the claims.

Applicants have also amended page 21, line 13 through page 22 to make some changes in the Brief Description of the Drawings as required under US Patent Practice.

Applicants have inserted no new matter into the application.

Applicants await an action on the merits.

Respectfully submitted,  
K.F. Ross P.C.



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